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TITLE: Slatted shelving support system

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US-CL-CURRENT: 312/111, 312/265.5

ABSTRACT:

CHG DATE=19990617 STATUS=O> An improvement in or modification of the shopfitting structure of our copending British Patent Application No.

8812170.2

(GB 2218898 A) comprises providing, for each vertical channel member, a forward

extension (41) to one of the opposite sides thereof and a laterally directed channel (42) in that forward extension for receiving an end (43) of a slatted shelving support rail (40). This adds an extra element of flexibility of construction, as a single basic structure in a shop can be used to support brackets as in GB 8812170.2 or slatted shelving panels for receiving conventional slatted shelving shelf brackets. <IMAGE>

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B5A7Y B7A1 B7CX B7C1 B7C2A B7C3 B7E3

(56) Documents cited
None

(58) Field of search
UK CL (Edition J) A4B
INT CL^a A47B

(54) Slatted shelving support system

(57) An improvement in or modification of the shopfitting structure of our copending British Patent Application No. 8812170.2 (GB 2218898 A) comprises providing, for each vertical channel member, a forward extension (41) to one of the opposite sides thereof and a laterally directed channel (42) in that forward extension for receiving an end (43) of a slatted shelving support rail (40). This adds an extra element of flexibility of construction, as a single basic structure in a shop can be used to support brackets as in GB 8812170.2 or slatted shelving panels for receiving conventional slatted shelving shelf brackets.

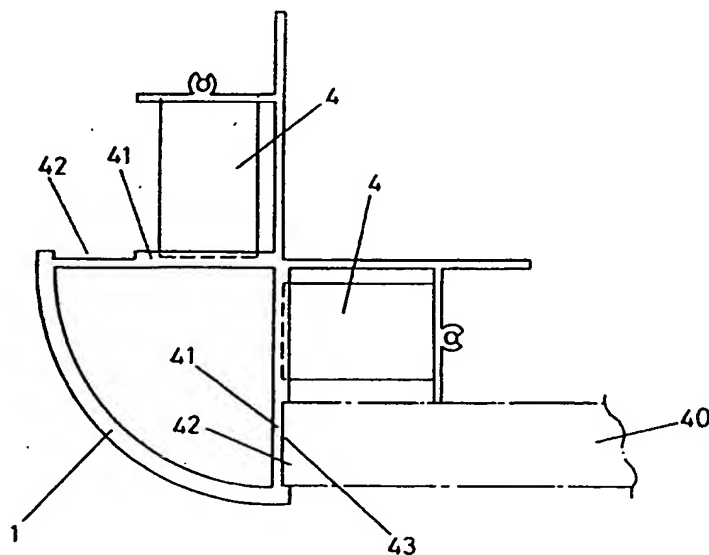


FIG. 27 B

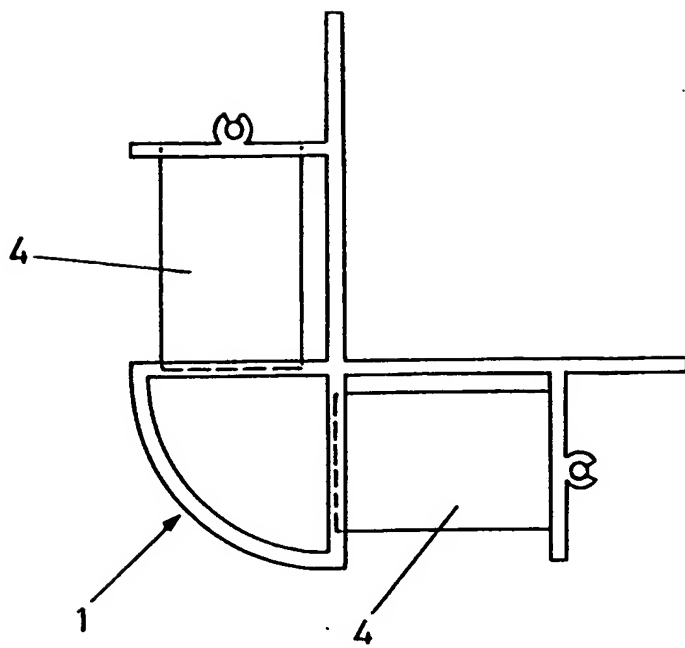


FIG. 27A

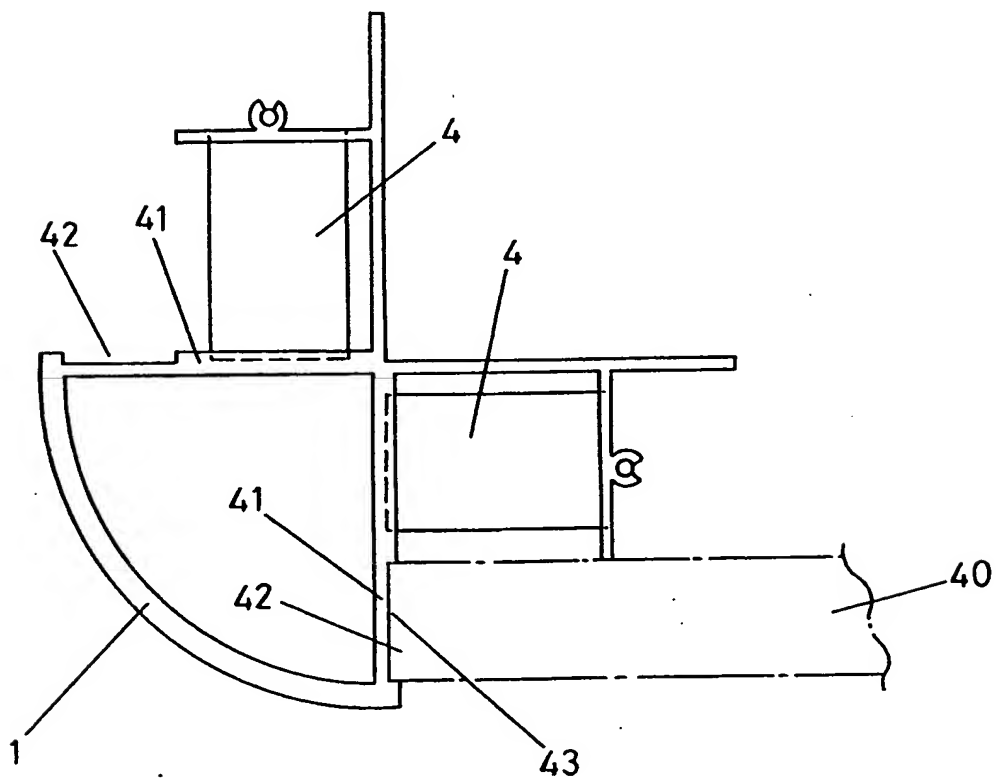


FIG. 27 B

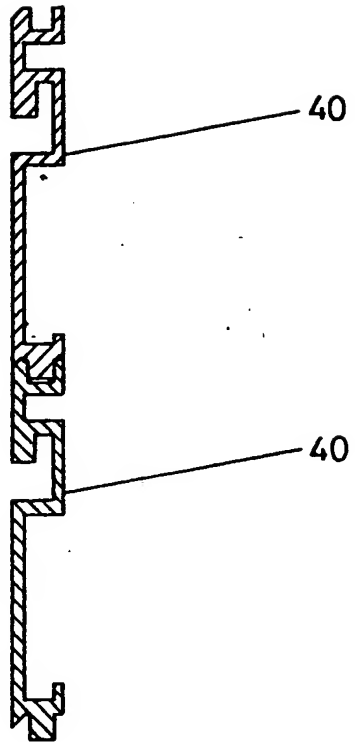


FIG. 28

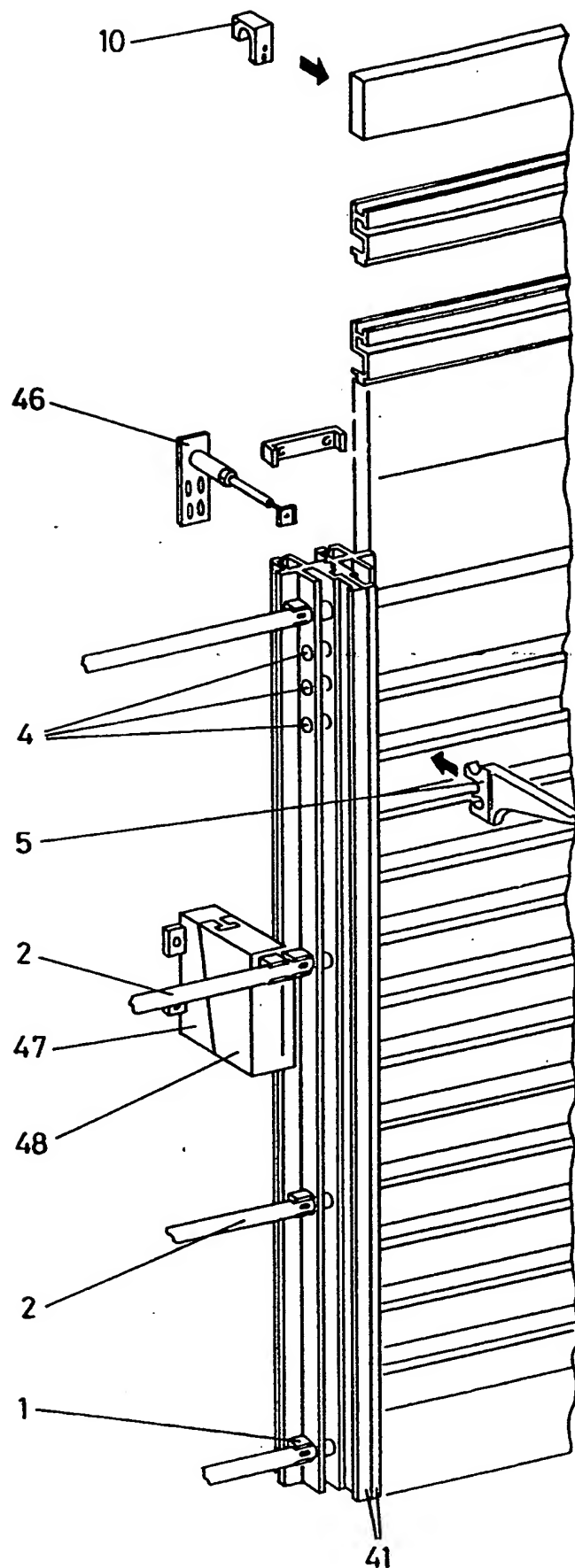


FIG. 29

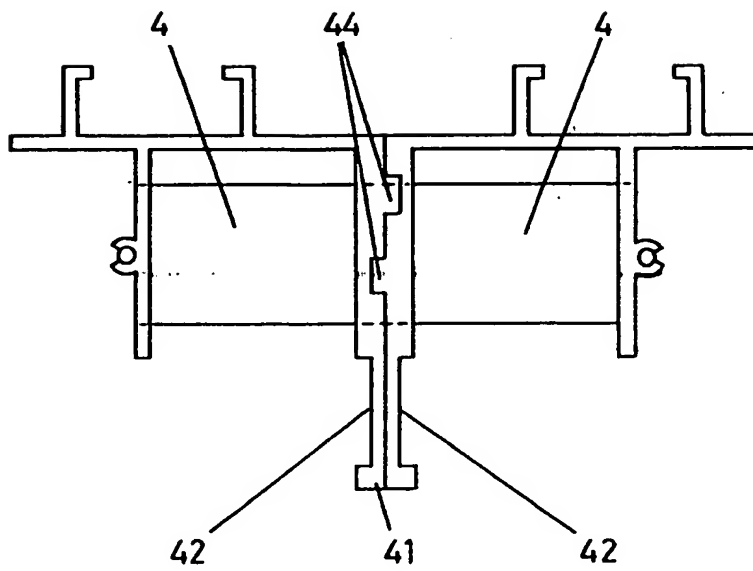


FIG. 30

-1-

TITLE:

Slatted Shelving Support System

DESCRIPTION:

FIELD OF THE INVENTION

This invention provides an improvement in or modification to the shopfitting system of my British Patent Application No. 8812170.2

BACKGROUND ART

My earlier British Patent Application identified above describes and claims a shopfitting structure comprising a vertical channel member mounting, between opposite sides thereof, a vertical array of identical equally spaced transverse load-bearing elements; and at least one support bracket for shelving or merchandise, securable to a pair of the transverse load-bearing elements by a pair of integrally formed mounting portions of the bracket, each mounting portion being formed resiliently to clip partially around its associated load-bearing element or into a shaped longitudinal groove in its associated transverse load-bearing element.

The shopfitting structure of the above British Patent Application offers a number of advantages over conventional slatted wall systems, including improved

visual appearance, ease of erection, the facility to change the cladding on site and tremendous strength. However it does not in its basic form offer the facility available in slatted wall systems of permitting horizontal adjustment of the shelves mounted between pairs of the support brackets. To that end my earlier Patent Application discloses (in Figure 25) a slatted shelving support rail 37 supported between a pair of suitably designed brackets 36. I have now realized that a further modification of the earlier designed shopfitting structure enables it to be used much more flexibly either to support the brackets of the original design or to support slatted shelving rails. Any combination of the two merchandise support means may be incorporated into the same shelving system, and changing the shelf layout in the shop can involve changing that combination.

SUMMARY OF THE INVENTION

The invention provides an improvement in the system of British Patent Application No. 8812170.2 wherein each vertical channel member comprises a forward extension to one of the opposite sides thereof, and a laterally directed channel formed in that forward extension for receiving an end of a slatted shelving support rail, whereby one such rail or a vertical stack of such rails may be supported between the mutually facing laterally directed channels of a pair of spaced vertical channel members.

The plane in which the slatted shelving support rail or rails is or are supported is forwardly of the vertical array of transverse load-bearing elements in the channel members, and preferably each support rail extends across the front of the vertical channel in the channel member, masking the load-bearing elements behind it.

The slatted shelving support rail is preferably an extruded aluminium rail, although timber, plywood, chipboard and laminates are also suitable materials. Each support rail is preferably tongued and grooved along its longitudinal edges, so that each rail in a stack interlocks firmly with the rail above it.

All of the variations, modifications and advantages of the basic shopfitting system of British Patent Application No. 8812170.2 are retained in the improvement described above.

Other improvements that have been made to the basic shopfitting structure include length adjusters for the tie bars, adjustable feet for free-standing column structures, and wedge systems for supporting the structure on a wall of the building, spaced from that wall by an adjustable amount.

DRAWINGS:

In the drawings the Figures have been numbered to run consecutively from those in my earlier Application, and the same reference numerals have been used where appropriate.

Figure 26 is a partially exploded perspective view of a shopfitting structure incorporating the improvement of this invention;

Figures 27A and 27B are horizontal sections through, respectively, the external corner channel member 1 of Figure 7 of GB 8812170.2 and one of the external corner channel members 1 of Figure 26;

Figure 28 is a vertical section through two extruded aluminium slatted shelving support rails;

Figure 29 is a partially exploded perspective view of another shopfitting support structure incorporating the

improvement of this invention; and
Figure 30 is a horizontal section through the two-piece channel member of Figure 29.

In Figure 26, the shopfitting support structure on the left-hand side of the Figure is basically as described in GB 8812170.2, with a support bracket 5 positioned for mounting on a pair of load-bearing elements 4 in the outwardly facing channel 12 of the left-hand corner channel member 1. Both channel members 1 of Figure 26 are identical, but the right-hand channel member illustrated mounts not support brackets 5 but a vertical stack of slatted shelving support rails 40 each being as illustrated in Figure 28.

Figure 27B illustrates clearly how, in the channel members 1 of Figure 26, one of the side walls 41 is extended forwardly by an amount marginally more than the width of the rails 40, which are shown in phantom. Formed in the forward extension of the side wall 41 is a shallow laterally facing channel 42 which receives one end 43 of each rail 40 slotted therein. The other end of each rail 40 is received in a facing channel 42 of another channel member 1.

It will be appreciated that the rails 40 may be stacked into an array extending the full height of the channel members 1 or may fill less than that full height. In the latter case the rails 40 may conveniently be positioned by means of clips secured to the tie bars 2 at the rear of the rails, and the intervening space or spaces filled by filler panels as in GB 8812170.2

A comparison of Figures 27A and 27B illustrates the nature and extent of the modification needed to the channel members 1 of Figure 7.

Figure 28 shows how the rails 40 are longitudinally tongued and grooved for added rigidity. The rails 40 are shown as extruded aluminium sections, which combines strength with an excellent fire resistance.

Figures 29 and 30 illustrate the shape of another channel member 1 incorporating forward extensions of one of the side walls 41 of the channels 12. In this embodiment the channel member 1 is provided with longitudinal tongues and grooves 44 which cooperate with similar tongues and grooves of an adjacent channel member 1.

Figures 26 and 29 also illustrate other advantageous fixing and cladding accessories. A hood 45 may be positioned around the top of the structure. A jack 46 may be provided to obtain precise positioning on a true vertical. Alternatively or in addition a pair of dovetailing wedges 47,48 may be provided, one connected to the supporting wall and one to one of the tie bars 2. Suitable positioning of the wedges permits the spacing of the structure relative to the wall to be accurately adjusted as the structure is screwed to the wall.

Also shown in Figure 26 are height-adjustable feet 49 for the channel members 1 and length adjusters 50 for the tie bars 2.

CLAIMS:

1. A shopfitting structure as claimed in British Patent Application No. 8812170.0, wherein each vertical channel member comprises a forward extension to one of the opposite sides thereof, and a laterally directed channel formed in that forward extension for receiving an end of a slatted shelving support rail, whereby one such rail or a vertical stack of such rails may be supported between the mutually facing laterally directed channels of a pair of spaced vertical channel members.
2. A structure according to claim 1, wherein the plane in which the slatted shelving support rail or rails is or are supported is forwardly of the vertical array of transverse load-bearing elements in the channel members.
3. A structure according to claim 2, wherein each support rail extends across the front of the vertical channel in the channel member, masking the load-bearing elements behind it.
4. A shopfitting structure substantially as described herein with reference to the drawings.